PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BP109776		CT/ISA/220 oplicable, item 5 below.
International application No.	International filing date (day month year)	(Earliest) Priority Date (day month year)
PCT/FI 2004/000579	4 October 2004	7 October 2003
Applicant		
Nokia Corporation et al		
This international search report has applicant according to Article 18. A	been prepared by this International Searchi copy is being transmitted to the Internation	ing Authority and is transmitted to the nal Bureau.
This international search report cons	ists of a total of 2 sheets.	
lt is also accompanied b	y a copy of each prior art document cited i	in this report.
1. Basis of the report.		
a. With regard to the language, t in the language in which it wa	he international search was carried out on s filed, unless otherwise indicated under this	the basis of the international application s item.
The international se furnished to this Au	earch was carried out on the basis of a tran thority (Rule 23.1(b)).	slation of the international application
b. With regard to any nucle	otide and/or amino acid sequence disclosed	in the international application, see Box
2. Certain claims were foun	d unsearchable (see Box No. II)	
3. Unity of invention is lack	ung (see Box No. III)	
4. With regard to the title,		
X the text is approved as s	ubmitted by the applicant.	
the text has been establis	shed by this Authority to read as follows:	
5. With regard to the abstract;		
	ubmitted by the applicant.	
	shed, according to Rule 38.2(b), by this Au ne month from the date of mailing of this in rity.	
6. With regard to the drawings,		
· · · · · · · · · · · · · · · · · · ·	e published with the abstract is Figure No.	6
X as suggested by the	4.1	in the Carina
	Authority, because the applicant failed to su	
	Authority, because this figure better charact	terizes the invention.
b. none of the figures is to	be published with the abstract.	

International application No.

		, , , , = =,, .	,					
A. CLASSIFICATION	ON OF SUBJECT MATTER							
IPC7: G10L 19, According to Internatio	/12 nal Patent Classification (IPC) or to both na	tional classification and IPC						
B. FIELDS SEARC								
Minimum documentation	on searched (classification system followed by	classification symbols)						
IPC7: G10L								
	d other than minimum documentation to the	extent that such documents are included	in the fields searched					
· · · · · · · · · · · · · · · · · · ·	lasses as above usualted during the international search (name)	of data have and where practicable conve	th tarme used)					
Dicerolle unta vasc co	isomed during the international search (name	or data base and, where practicable, search	in terms used)					
EPO-INTERNAL,	WPI DATA, PAJ, INSPEC							
C. DOCUMENTS	CONSIDERED TO BE RELEVANT							
Category* Citation	of document, with indication, where app	ropriate, of the relevant passages	Relevant to claim No.					
A EP 109	98298 A2 (MITSUBISHI DENKI May 2001 (09.05.2001), pa	KABUSHIKI KAISHA), ragraphs 0036 - 0052	1-32					
1 1	75817 B1 (MUELLER, J-M. ET 6 January 2001 (16.01.2001) ine 44 - column 2, line 43,	1-32						
	EP 0307122 A1 (BRITISH TELECOMMUNICATIONS), 26 August 1988 (26.08.1988), claims; abstract							
	030097258 A1 (THYSSEN, J.), 22.05.2003), paragraphs 008	1-22						
	·							
Further docume	ents are listed in the continuation of Box	C. X See patent family anne						
Special categories o		"T" later document published after the in	ternational filing date or priority					
to be of particular r		date and not in conflict with the appl the principle or theory underlying the	e inventión					
filing date "L" document which may throw doubts on priority claim(s) or which is. "Countered novel or cannot be considered to involve an invention step when the document is taken alone.								
special reason (as sp "O" document referring means	commined with one or more other sich documents, such combinat							
"P" document published the priority date cla	prior to the international filing date but later than imed	*&" document member of the same pater						
Date of the actual co	Date of the actual completion of the international search Date of mailing of the international search report							
8 February 20	8 February 2005 1 0 -02- 2005							
Name and mailing a	•	Authorized officer						
Swedish Patent C Box 5055, S-102 4		Enadaik Planavist /001						
Facsimile No. +46	Fredrik Blomqvist /OGU Telephone No. +46 8 782 25 00							

Information on patent family members

30/01/2005

International application No.

Ε̈́P	1098298	A2	09/05/2001	CN CN JP JP	1135527 1295317 3594854 2001134297	A B	21/01/2004 16/05/2001 02/12/2004 18/05/2001
US	6175817	B1	16/01/2001	NONE			
EP	0307122	A1	26/08/1988	SE	0307122		
				AT	75069	Ţ	15/05/1992
				CA	1337217		03/10/1995
				DE	3870114	A	21/05/1992
				DK			25/01/1999
				DK FI	206189 103221	A B	27/04/1989 00/00/0000
				FI	892049	A	28/04/1989
				GB	8720389	D	00/00/0000
				HK	128896	A	26/07/1996
				JP	2501166	Î	19/04/1990
				JP	2957588		04/10/1999
				NO	301356		13/10/1997
				NO	891724	A	26/04/1989
				US	RE35057		10/10/1995
				US	4991214	Ā	05/02/1991
				WO	8902147		09/03/1989
				GB	8721667		00/00/0000

INTERNATIONAL SEARCH REPORT Information on patent family members

30/01/2005

International application No.

US	20030097258	A1	22/05/2003	บร	6813602	В	02/11/2004
				EP	1105871		13/06/2001
				ΤŴ	440814		00/00/0000
				US	6480822	В	12/11/2002
				US	20020138256	A	26/09/2002
				WÓ	0011655	A	02/03/2000
				CA	2341712		02/03/2000
				EP	1105870		13/06/2001
				EΡ	1105872	A .	13/06/2001
				EP	1110209		27/06/2001
				ΕP	1194924	A	10/04/2002
				JP	2002523806		30/07/2002
				TW	440813		00/00/0000
				TW	444187	В	00/00/0000
				TW.	448417		00/00/0000
				TW	448418		00/00/0000
				TW	454168		00/00/0000
				TW	454169		00/00/0000
				TW	454170		00/00/0000
				TW	454171		00/00/0000
				US	5918409		06/07/1999
				US	6104992		15/08/2000
				US	6173257		09/01/2001
				US	6188980		13/02/2001
				US	6240386		29/05/2001
				US	6260010	В	10/07/2001
				US	6330531	В	11/12/2001
				US	6330533	В	11/12/2001
				US	6385573	В	07/05/2002
				US	6397176	В	28/05/2002
				US	6449590		10/09/2002
				US	6493665	В	10/12/2002
				US	6507814		14/01/2003
				ŲŞ	6556966		29/04/2003
				US	6714907		30/03/2004
				US	6823303		23/11/2004
				US	20010023395		20/09/2001
				US	20020007269		17/01/2002
				US	20020103638		01/08/2002
				WO	0011648		02/03/2000
				WO	0011649		02/03/2000
				WO	0011650		02/03/2000
				WO	0011651		02/03/2000
				ŴΟ	0011652		02/03/2000
				WO	0011653		02/03/2000
				WO	0011654		02/03/2000
				WÖ	0011656		02/03/2000
				WO	0011657		02/03/2000
				WO	0011658		02/03/2000
				WO	0011659		02/03/2000
				WO	0011660		02/03/2000
				WO	0011661	A	02/03/2000

International application No.

A. CLAS	SIFICATION OF SUBJECT MATTER		
IDC7.	0101 10712		
According t	G10L 19/12 to International Patent Classification (IPC) or to both	national classification and IPC	
B. FIELD	DS SEARCHED		
Minimum d	ocumentation searched (classification system followed	by classification symbols)	•
IPC7: (G10L		
Documenta	tion searched other than minimum documentation to t	he extent that such documents are included	in the fields searched
SE, DK,	FI,NO classes as above	•	
Electronic d	ata base consulted during the international search (nar	ne of data base and where pronticable, sear	ch terms used)
FDO-TAI	TERNAL, WPI DATA, PAJ, INSPEC	1	
1 "	MENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where a	propriate, of the relevant passages	Relevant to claim No.
, A	EP 1098298 A2 (MITSUBISHI DENKI 9 May 2001 (09.05.2001), p	KABUSHIKI KAISHA), aragraphs 0036 - 0052	1-32
			
A	US 6175817 B1 (MUELLER, J-M. ET 16 January 2001 (16.01.2001 line 44 - column 2, line 43), column 1.	1-32
	· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , ,	
	· · · · · · · · · · · · · · · · · · ·		
A	EP 0307122 A1 (BRITISH TELECOMM 26 August 1988 (26.08.1988)	UNICATIONS), , claims; abstract	1-32
A	US 20030097258 A1 (THYSSEN, J.) (22.05.2003), paragraphs 00	, 22 May 2003 83 - 0086; abstract	1-22
	· ·	•	
	ander despe cours belon had the sage sage .		
[Furthe	er documents are listed in the continuation of Bo	x C. X See patent family annea	x.
"A" document to be of	categories of cited documents: nt defining the general state of the art which is not considered particular relevance pplication or patent but published on or after the international	the principle or theory underlying the	cation but cited to understand
"L" documen	ite at which may throw doubts on priority claim(s) or which is establish the publication date of another citation or other	"X" document of particular relevance: the considered novel or cannot be conside step when the document is taken alone	red to involve an inventive
"O" document means	eason (as specified) at referring to an oral disclosure, use, exhibition or other	"Y" document of particular relevance: the considered to involve an inventive ste combined with one or more other such being obvious to a person skilled in the	o when the document is a documents, such combination
the prior	nt published prior to the international filing date but later than ity date claimed	"&" document member of the same patent	· ·
	actual completion of the international search	Date of mailing of the international s	earch report
8 Febru	ary 2005	1 0 -02- 2005	·
Name and 1	mailing address of the ISA/	Authorized officer	
	atent Office S-102 42 STOCKHOLM	Francis Planaut -+ 1004	
Facsimile N	lo. +46 8 666 02 86	Fredrik Blomqvist /OGU Telephone No. +46 8 782 25 00	
Form PCT/IS/	A/210 (second sheet) (January 2004)		

Information on patent family members

30/01/2005

International application No. PCT/FI 2004/000579

•						
EP	1098298	A2	09/05/2001	CN CN CN	1135527 B,C 1295317 A 3594854 B 2001134297 A	21/01/2004 16/05/2001 02/12/2004 18/05/2001
US	6175817	B1	16/01/2001	NONE		- 400 200 000 000 000 000 000 000 000 000
EP	0307122	A1	26/08/1988	SE AT	0307122 T3 75069 T	15/05/1992
			·	CA DE	1337217 A,C 3870114 A	03/10/1995 21/05/1992
				DK DK	172571 B 206189 A	25/01/1999 27/04/1989
				FI FI	103221 B 892049 A	00/00/0000 28/04/1989
				GB HK	8720389 D 128896 A	00/00/0000 26/07/1996
				JP JP	2501166 T 2957588 B	19/04/1990 04/10/1999
				NO NO	301356 B 891724 A	13/10/1997 26/04/1989
				US US	RE35057 E 4991214 A	10/10/1995 05/02/1991
	•			WO	8902147 A	09/03/1989

Information on patent family members

30/01/2005

International application No. PCT/FI 2004/000579

US	20030097258	A1	22/05/2003	US	6813602 B	02/11/2004
				EP	1105871 A	13/06/2001
				TW	440814 B	00/00/0000
				US	6480822 B	12/11/2002
				US	20020138256 A	26/09/2002
				WO	0011655 A	02/03/2000
		-		CA	2341712 A	02/03/2000
				EP	1105870 A	13/06/2001
			•	EP	1105872 A	13/06/2001
				EP	1110209 A	27/06/2001
			•	ĒΡ	1194924 A	10/04/2002
				JP	2002523806 T	30/07/2002
				TW	440813 B	00/00/0000
			,	TW	444187 B	00/00/0000
				TW	448417 B	00/00/0000
				TW	448418 B	00/00/0000
	• •			TW	454168 B	00/00/0000
				TW	454169 B	00/00/0000
					454170 B	00/00/0000
			•	ŢW	454170 B 454171 B	00/00/0000
				TW		06/07/1999
				US	5918409 A	
				US	6104992 A	15/08/2000
				US	6173257 B	09/01/2001
				US	6188980 B	13/02/2001
				US	6240386 B	29/05/2001
			•	US	6260010 B	10/07/2001
	·			US	6330531 B	11/12/2001
				US	6330533 B	11/12/2001
				US	6385573 B	07/05/2002
	.*			US	6397176 B	28/05/2002
				US	6449590 B	10/09/2002
				US	6493665 B	10/12/2002
				US	6507814 B	14/01/2003
				US	6556966 B	29/04/2003
				US	6714907 B	30/03/2004
				US	6823303 B	23/11/2004
				US	20010023395 A	20/09/2001
			•	US	20020007269 A	17/01/2002
				US	20020103638 A	01/08/2002
				WO	0011648 A	02/03/2000
				WO	0011649 A	02/03/2000
				WO	0011650 A	02/03/2000
				WO	0011651 A	02/03/2000
				WO	0011652 A	02/03/2000
				WO	0011653 A	02/03/2000
	×			WO	0011654 A	02/03/2000
				WO	0011656 A	02/03/2000
				WO	0011650 A	02/03/2000
				WO	0011657 A	02/03/2000
			1.41		0011659 A	02/03/2000
	•			WO		02/03/2000
				WO	0011660 A	
				WO	0011661 A	02/03/2000